BELKIN®

Enhanced Wireless USB Adapter

User Manual

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INTRODUCTION

Thank you for purchasing the Belkin Enhanced Wireless USB Adapter. Now you can take advantage of this great new technology and gain the freedom to network your home and office computers wirelessly. This Adapter allows you to connect a notebook computer to your network. Please be sure to read through this User Manual completely, and pay special attention to the section entitled "Placement of your Wireless Networking Hardware for Optimal Performance".
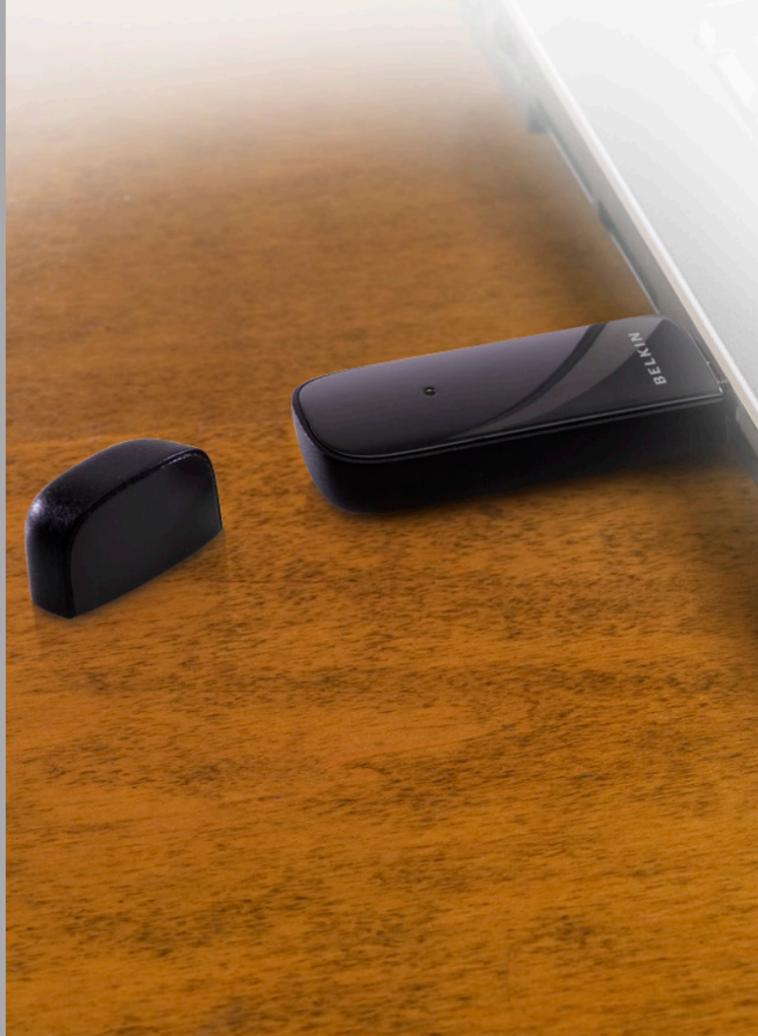
Benefits of a Home Network

Your Belkin Home Network will allow you to:

- Share one high-speed Internet connection with all the computers in your home

- Share resources, such as files, and hard drives among all the connected computers in your home

- Share a single printer with the entire family

- Share documents, music, video, and digital pictures

- Store, retrieve, and copy files from one computer to another

- Simultaneously play games online, check Internet email, and chat

Advantages of a Wireless Network

- Mobility –you'll no longer need a dedicated "computer room"— now you can work on a networked laptop or desktop computer anywhere within your wireless range

- Easy installation – Belkin Easy Installation Wizards make setup simple

- Flexibility – set up and access printers, computers, and other networking devices from anywhere in your home

- Easy expansion – the wide range of Belkin networking products let you expand your network to include devices such as printers and gaming consoles

- No cabling required – you can spare the expense and hassle of retrofitting Ethernet cabling throughout the home or office

- Widespread industry acceptance – choose from a wide range of interoperable networking products

Placement of your Wireless Networking Hardware for Optimal Performance

Your wireless connection will be stronger the closer your computer is to your wireless router (or access point). Typical indoor operating range for your wireless devices is between 100 and 200 feet. In the same way, your wireless connection and performance will degrade somewhat as the distance between your wireless router (or access point) and connected devices increases. This may or may not be noticeable to you. As you move farther from your wireless router (or access point), connection speed may decrease. Factors that can weaken signals simply by getting in the way of your network's radio waves are metal appliances or obstructions, and walls.

If you have concerns about your network's performance that might be related to range or obstruction factors, try moving the computer to a position between five and 10 feet from the wireless router (or access point) in order to see if distance is the problem. If difficulties persist even at close range, please contact Belkin Technical Support.

Note: While some of the items listed below can affect network performance, they will not prohibit your wireless network from functioning; if you are concerned that your network is not operating at its maximum effectiveness, this checklist may help.

1. Placement of your Wireless Router (or Access Point)

Place your wireless router (or access point), the central connection point of your network, as close as possible to the center of your wireless network devices.

To achieve the best wireless network coverage for your "wireless clients," (i.e., computers enabled by Belkin Adapters or Cards):

- Ensure that your wireless router's (or access point's) antennas are parallel to each other, and are positioned vertically (toward the ceiling). If your wireless router (or access point) itself is positioned vertically, point the antennas as much as possible in an upward direction.

- In multistory homes, place the wireless router (or access point) on a floor that is as close to the center of the home as possible. This may mean placing the wireless router (or access point) on an upper floor.

- Try not to place the wireless router (or access point) near a cordless 2.4GHz phone.

2. Avoid Obstacles and Interference

Avoid placing your wireless router (or access point) near devices that may emit radio "noise", such as microwave ovens. Other objects that can inhibit wireless communication can include:

- Refrigerators
- Washers and/or dryers
- Metal cabinets
- Large aquariums
- Metallic-based, UV-tinted windows

If your wireless signal seems weak in some spots, make sure that objects such as these are not blocking the signal's path between your computers and wireless router (or access point).

3. Cordless Phone Placement

If the performance of your wireless network is impaired after attending to the above issues, and you have a cordless phone:

- Try moving cordless phones away from the wireless router (or access point) and your wireless-enabled computers.

- Unplug and remove the battery from any cordless phone that operates on the 2.4GHz band (check manufacturer's information). If this fixes the problem, your phone may be interfering.

- If your phone supports channel selection, change the channel on the phone to the farthest channel from your wireless network as possible. For example, change the phone to channel 1 and move your wireless router (or access point) to channel 11. (Your channel selection will vary depending on your region.) See your phone's user manual for detailed instructions.

- If necessary, consider switching to a 900MHz or 5GHz cordless phone.

4. Choose the "Quietest" Channel for your Wireless Network

In locations where homes or offices are close together, such as apartment buildings or office complexes, there may be wireless networks nearby that can conflict with yours. Use the Site Survey capabilities of your Belkin Wireless Networking Utility to locate any other wireless networks, and move your wireless router (or access point) and computers to a channel as far away from other networks as possible.

Experiment with more than one of the available channels in order to find the clearest connection and avoid interference from neighboring cordless phones or other wireless devices.

For more Belkin wireless networking products, use the detailed Site Survey and wireless channel information included in your User Manual.

5. Secure Connections, VPNs, and AOL

Secure connections typically require a user name and password, and are used where security is important. Secure connections include:

•   Virtual Private Network (VPN) connections, often used to connect remotely to an office network

•   The "Bring Your Own Access" program from America Online (AOL), which lets you use AOL through broadband provided by another cable or DSL service

•   Most online banking websites

•   Many commercial websites that require a user name and password to access your account

Secure connections can be interrupted by a computer's power management setting, which causes it to "go to sleep." The simplest solution to avoid this is to simply reconnect by re-running the VPN or AOL software, or by re-logging into the secure website.

A second alternative is to change your computer's power management settings so it does not go to sleep; however, this may not be appropriate for portable computers. To change your power management setting in Windows, see the "Power Options" item in the Control Panel.

If you continue to have difficulty with Secure Connections, VPNs, and AOL, please review steps 1–4 in the previous pages to be sure you have addressed these issues.

These guidelines should allow you to cover the maximum possible area with your wireless router. Should you need to cover an even wider area, we suggest the Belkin Wireless Range Extender/Access Point.

For more information regarding our networking products, visit our website at www.belkin.com/networking or call Belkin Technical Support.

Product Features

The Adapter complies with the IEEE 802.11g specification to communicate with other 802.11g-compliant wireless devices at up to 54Mbps*. The Adapter is also compatible with draft-802.11n devices at 150Mbps as well as 802.11b products at 11Mbps. The Adapter operates on the same 2.4GHz frequency band as 802.11b/g Wi-Fi® products.

- 2.4GHz ISM (Industrial, Science, and Medical) band operation

- Integrated easy-to-use Belkin Wireless Networking Utility

- USB 2.0 interface, for operation in virtually any computer with a USB 2.0 bus-power port

- WPA, WPA2, 64-bit WEP (Wired Equivalent Privacy), or 128-bit encryption

- Wireless access to networked resources

- Data rate of up to 150Mbps* (draft 802.11n), 54Mbps (802.11g), or 11Mbps (802.11b)

- Easy installation and use

- LED power and network link/activity indicator

Applications and Advantages

• Wireless roaming with a laptop around the home or office

Offers the freedom of networking without cables

• Connection rates of up to 150Mbps*

Provides immediate high-speed wireless connectivity at home, work, and hotspot locations without compromising the use of existing 802.11b/g products

• Compatibility with 802.11b/g products

The Adapter is backward-compatible with existing Wi-Fi (IEEE 802.11b/g) products

• Difficult-to-wire environments

Enables networking in buildings with solid or finished walls, or open areas where wiring is difficult to install

• Frequently changing environments

Adapts easily in offices or environments that frequently rearrange or change locations

• SOHO (Small Office/Home Office) networking needs

Provides the easy and quick, small network installation SOHO users need

Product Specifications

Host Interface: USB 2.0

Operating Temperature: 32–140 degrees F (0–60 degrees C)

Storage Temperature: -4–176 degrees F (-20–80 degrees C)

Humidity: Max. 90% (non-condensing)

Typical Operating Range: Up to 1,000 ft.**

*NOTE: The standard transmission rate—150Mbps—is the physical data rate. Actual data throughput will be lower.

**Wireless performance may vary depending on the networking environment.
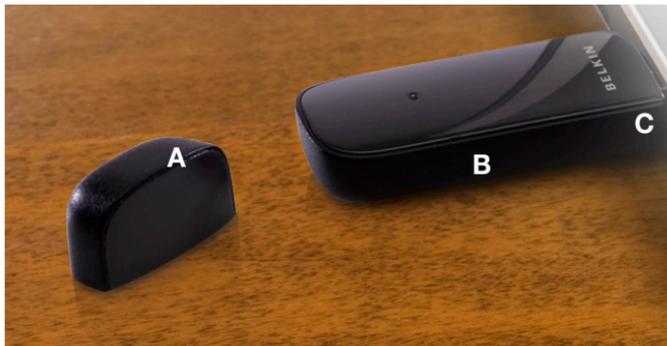
(a) Protective Cap

The cap is provided to protect the USB connector during transportation. Remove the cap before inserting the Adapter to your computer's USB port.

(b) Power/Activity LED

Lights when the Adapter is powered on and flashes when it is active.

(c) USB Connector

Part of the Adapter that fits into your computer's USB port.

System Requirements

• PC-compatible laptop with one available USB 2.0 bus-power port
• Windows® 2000, XP with SP2, or Vista®***

Package Contents

• Enhanced Wireless USB Adapter
• Quick Installation Guide
• CD with Installation Software and User Manual

A. Installation Process for Windows Vista

***NOTE:** For information on updated drivers, please visit the Belkin website at www.belkin.com/support.

IMPORTANT: INSTALL THE SOFTWARE BEFORE INSERTING THE ADAPTER.

A.1 Insert the Installation Software CD into your CD-ROM drive.

A.2 Click "Next" to begin the installation process.
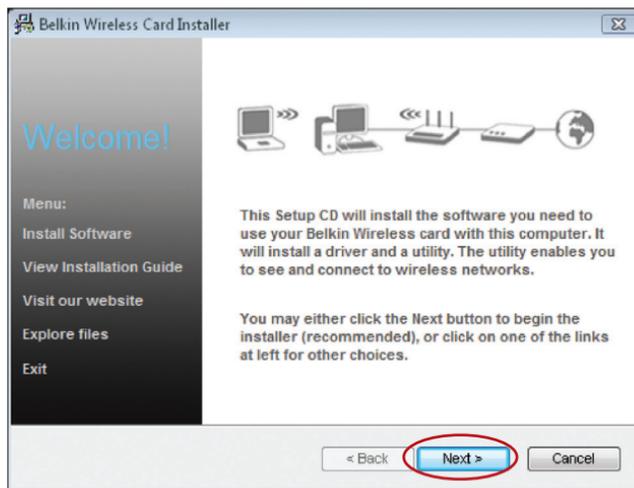
Note: If the Belkin Wireless Card Installer screen does not appear within 20 seconds, access your CD-ROM by double-clicking on the "My Computer" icon; then double-click on the CD-ROM drive into which the installation CD has been placed. If the Installer does not start automatically, double-click on the icon named "Installer.exe".

A.3 The InstallShield Wizard will start the installation process.
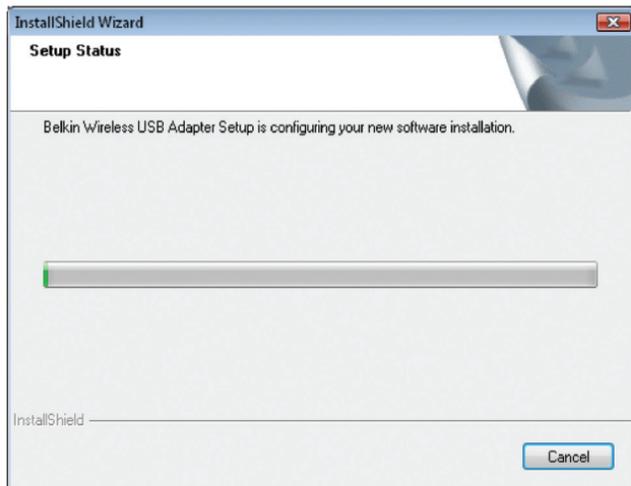
A.4 A window may appear showing the message, "Windows can't verify the publisher of this driver software". This DOES NOT indicate a problem. Our software has been fully tested and is compatible with this operating system. Click on "Install this driver software anyway" to continue.

A.5 When prompted, plug in your Adapter.

A.6 When the installation completes, you will see the following pop-up message on your Windows taskbar.

**A.7** Click "Finish" to restart your computer.
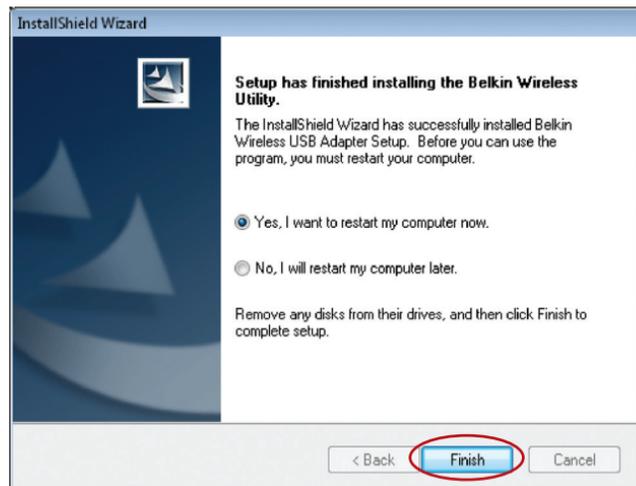
A.8 To connect to the Internet, open the Network and Sharing Center by first opening the Control Panel from the "Start" menu.
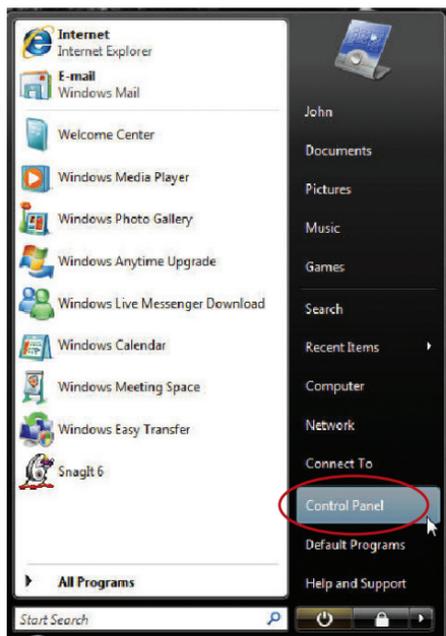
**A.9** In the Control Panel, click on "View network status and tasks".
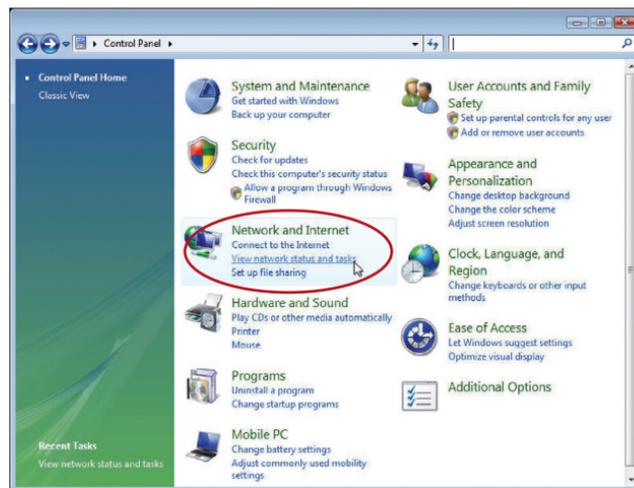
A.10 In the Network and Sharing Center, click on "Connect to a network".
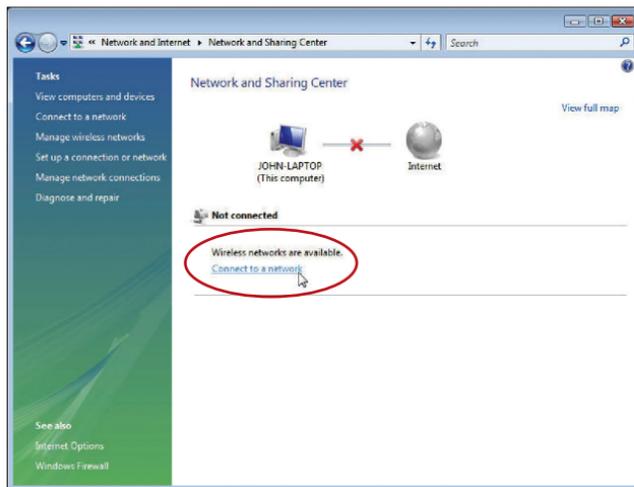
**A.11** In the next screen, select an available wireless network and click "Connect".
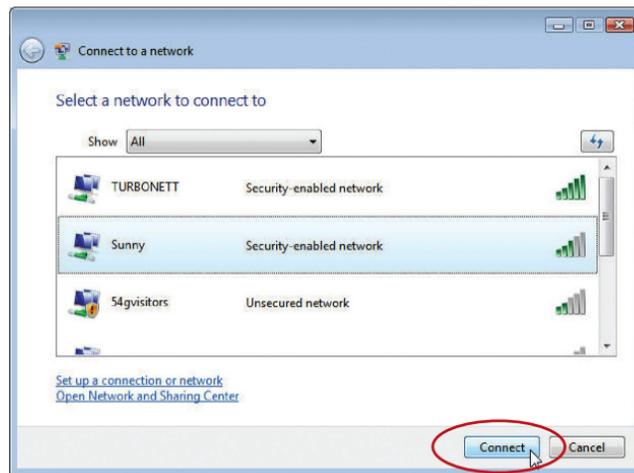
A.12 Your Adapter will attempt to connect to the selected network.
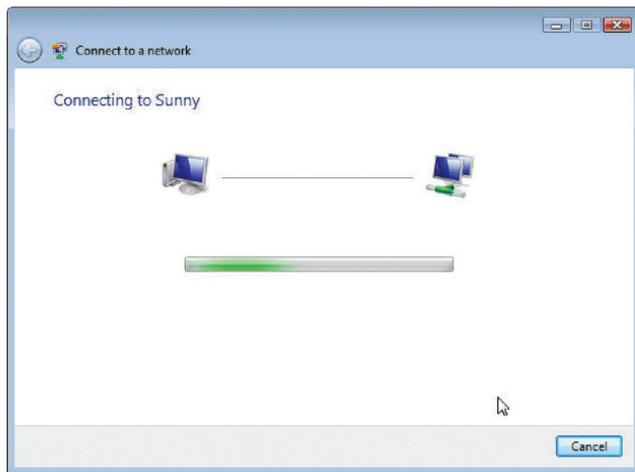
A.13 Depending on the security settings of your wireless network, you may be prompted to enter a network security key or a passphrase. Click "Connect" after you have done so.
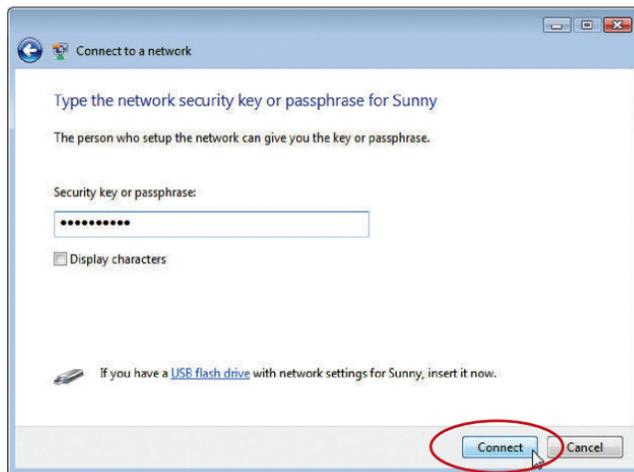
A.14 After connecting to the network, you can choose to save this network and connect automatically when your Adapter is in range.
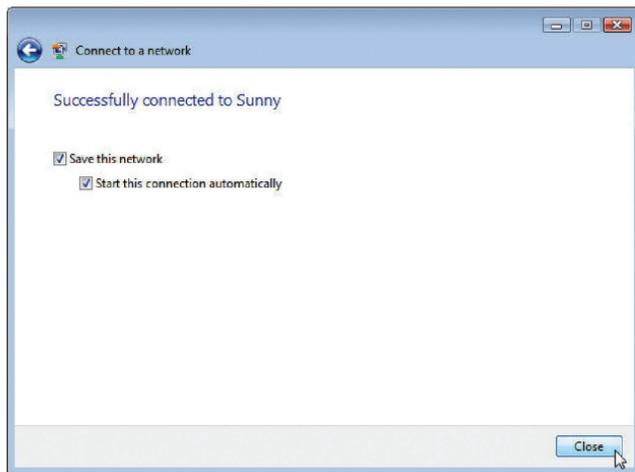
A.15 The Network and Sharing Center now indicates the network connection that you have just established. The links on the left of the window allow you to configure your network connections.
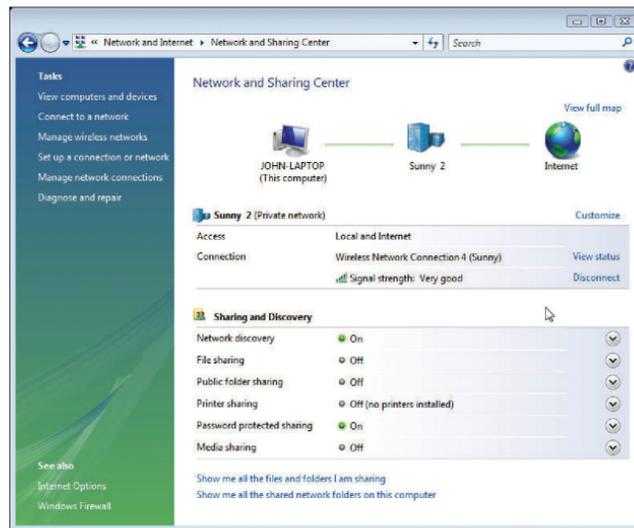
B. Installation Process for Windows Operating Systems other than Windows Vista

IMPORTANT: INSTALL THE SOFTWARE BEFORE INSERTING THE ADAPTER.

B.1 Insert the Installation Software CD into your CD-ROM drive.

B.2 The Belkin Wireless Card Installer screen will automatically appear within up to 20 seconds. Click "Install Software" or "Next" to start the installation.
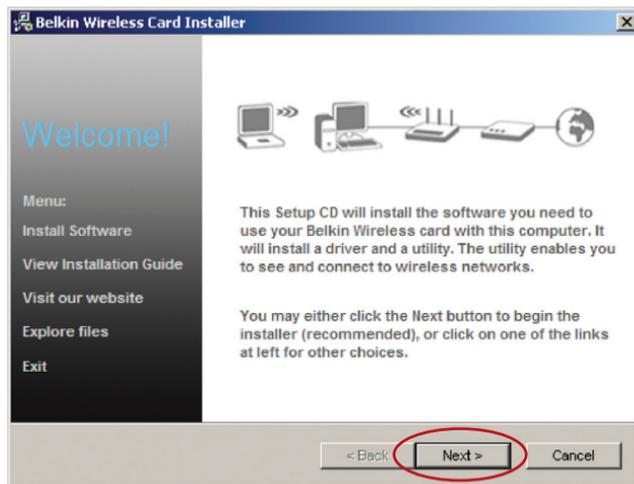
Note: If the Belkin Wireless Card Installer screen does not appear within 20 seconds, access your CD-ROM by double-clicking on the "My Computer" icon; then double-click on the CD-ROM drive into which the installation CD has been placed. Then, double-click on the icon named "Installer.exe".

B.3 Select a destination folder for the software installation by clicking "Browse"; or, simply click "Next" to install to the default location.

InstallShield Wizard

Choose Destination Location

Setup will install Belkin Wireless USB Adapter in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder

C:\Program Files\Belkin\F6D4050\v1   Browse...

InstallShield

< Back   Next >   Cancel
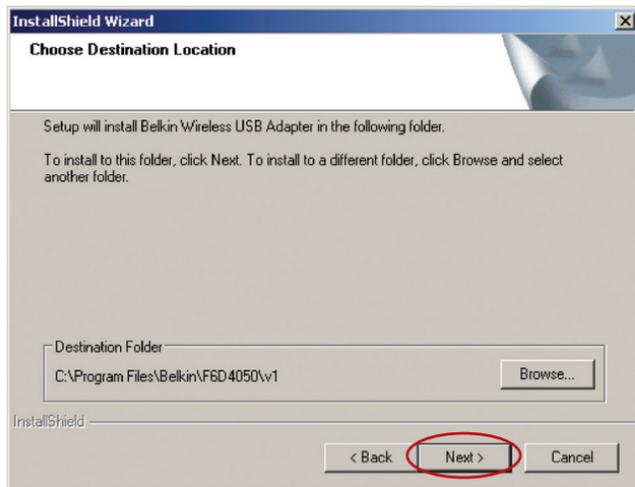
B.4 A Setup Status screen lets you know where you are in the setup process.

InstallShield Wizard

Setup Status

Belkin Wireless USB Adapter Setup is configuring your new software installation.

InstallShield

Cancel
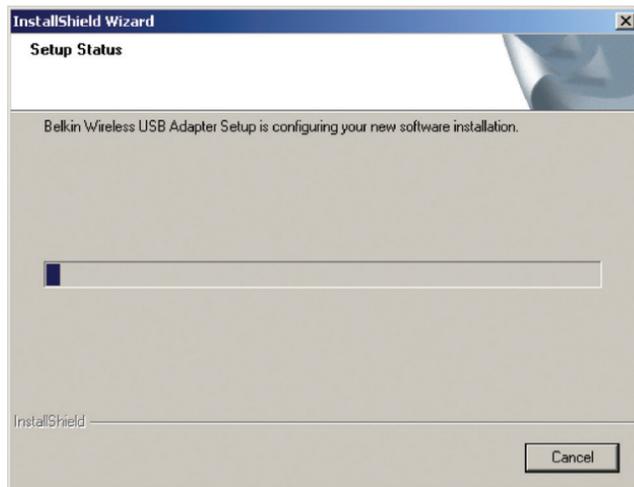
B.5 A window may appear showing the message, "The software you are installing…" This DOES NOT indicate a problem. Our software has been fully tested and is compatible with this operating system. Click on "Continue Anyway" to continue.

B.6 When prompted, plug in your Adapter.

Please plug in your USB Adapter now.

Software Installation

⚠ The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.

[Continue Anyway]　[STOP Installation]

B.7 The Found New Hardware Wizard might appear in 3–15 seconds. If it does, select "Install the software automatically" and click "Next" to install the software.

Found New Hardware Wizard

Welcome to the Found New Hardware Wizard

This wizard helps you install software for:

Belkin F6D4050 Enhanced Wireless USB Adapter

If your hardware came with an installation CD or floppy disk, insert it now.

What do you want the wizard to do?

○ Install the software automatically (Recommended)
○ Install from a list or specific location (Advanced)

Click Next to continue.

< Back   Next >   Cancel

B.8 Click "Finish" to restart your computer.

InstallShield Wizard

Setup has finished installing the Belkin Wireless Utility.

The InstallShield Wizard has successfully installed Belkin Wireless USB Adapter Setup. Before you can use the program, you must restart your computer.

○ Yes, I want to restart my computer now.

○ No, I will restart my computer later.

Remove any disks from their drives, and then click Finish to complete setup.

< Back   Finish   Cancel

C. Configuration

**Using the Belkin Wireless Networking Utility**

C.1 After restarting your computer, double-click the Belkin Wireless Networking Utility icon on the desktop screen.

**Note: The Belkin Wireless Networking Utility icon can also be found on the system tray.**
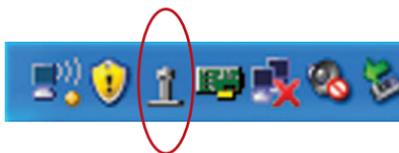
C.2 The Belkin Wireless Networking Utility screen will appear.
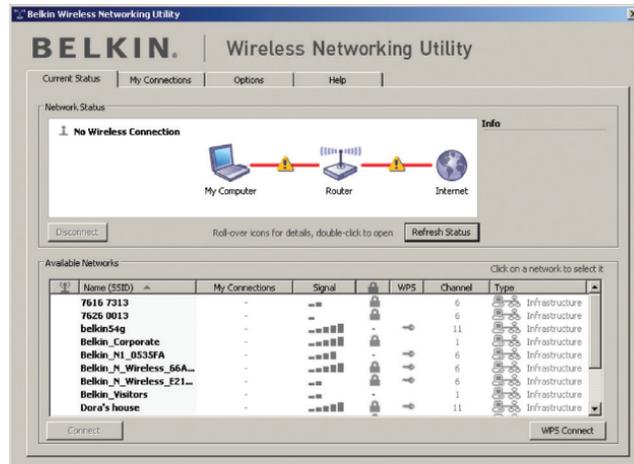
C.3 Select a network to which to connect from the "Available Networks" list and click "Connect".

Note: In order to see your available networks, you must be near a working wireless router or access point.

Installation is now complete.

USING THE BELKIN WIRELESS NETWORKING UTILITY

After successfully installing the Belkin Wireless Networking Utility (WNU), configurations for wireless connection and security are just a few easy clicks away.

Accessing the Belkin Wireless Networking Utility from the Windows System Tray

To access the WNU, simply place your mouse pointer and right-click over the WNU icon on the Windows task tray.

If the icon is not present, double-click the Belkin Wireless Networking Utility icon on the desktop screen.

The WNU's default screen is the "Current Status" tab. The "Current Status" tab displays the current Network Status and Available Networks.
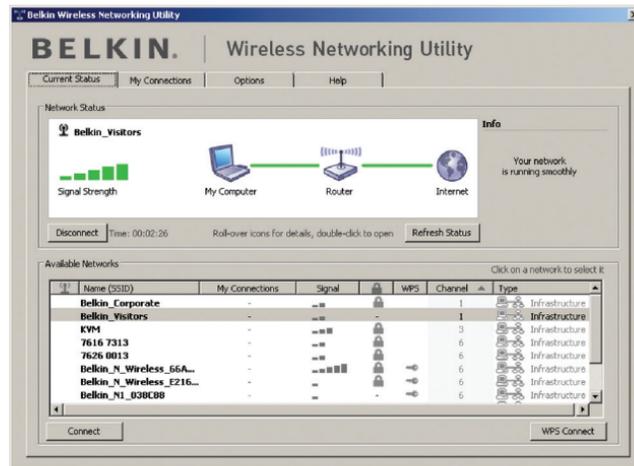
Network Status

This window displays the connectivity status of the current network. It even displays connectivity between the computer and router, and router and Internet. In the event of a connectivity problem, this window can be used to determine the problem's source (e.g. computer, router, or Internet/modem).

Available Networks

This window displays the available networks at the current location as well as their SSID, Signal Strength, Security Type, WPS-enabled connection, Channel, and Network Type.

Lost Wireless Connection

If the current wireless connection is lost, a window will pop up and the WNU will attempt to reconnect.

Connection Failure

Right-click on the WNU icon in the Windows task tray and more options will appear. You can retry, view solution tips, or choose another network in the "Available Networks" section.

Network Status and Solution Tips

To further understand the current Network Status, click "Open Wireless Utility". The default screen will be the "Current Status" tab and the "Network Status" section determines which connections are good and/or faulty.

The WNU also features an "Info" section that provides troubleshooting tips.

Managing Wireless Network Profiles

The "My Connections" tab on the WNU allows you to add, edit, and delete connection profiles.

Connecting to a Secure Wi-Fi® Network

If you choose to connect to a secure network, determine the type of security (WPA/WPA2 or WEP) and use the appropriate field in the dialog box.

When you select a network using encryption, you will first see the simple security screen.
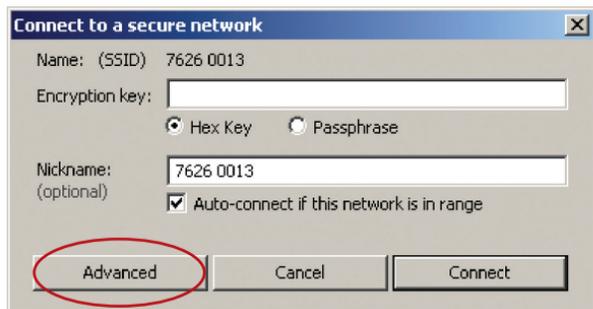
Click the "Advanced" button to see other security options, including choosing the security type for this connection.
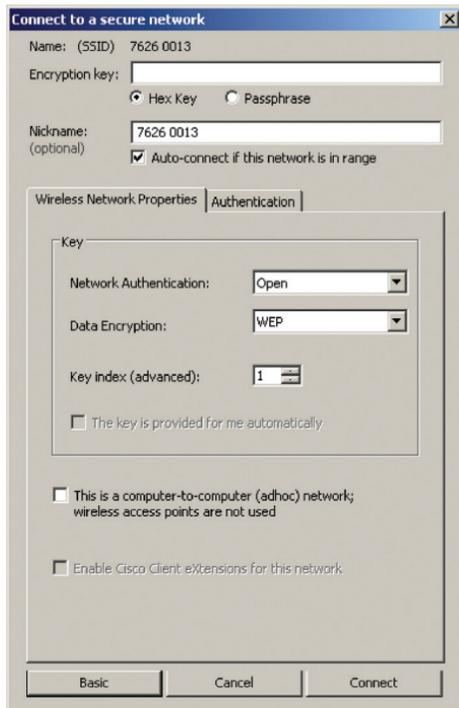
Wireless Equivalent Privacy (WEP) is a less secure, but more widely adopted wireless security protocol. Depending on the security level (64- or 128-bit), the user will be asked to input a 10- or 26-character hex key. A hex key is a combination of letters, a–f, and numbers, 0–9.

Wi-Fi Protected Access (WPA/WPA2) is the new standard in wireless security. Instead of a hex key, WPA/WPA2 uses only passphrases, which are much easier to remember. The passphrase is 8–63 characters and can consist of alphabet letters and numbers.

Using Wi-Fi Protected Setup PBC – Push Button Configuration (Recommended)

1.   Click the "WPS Connect" button.
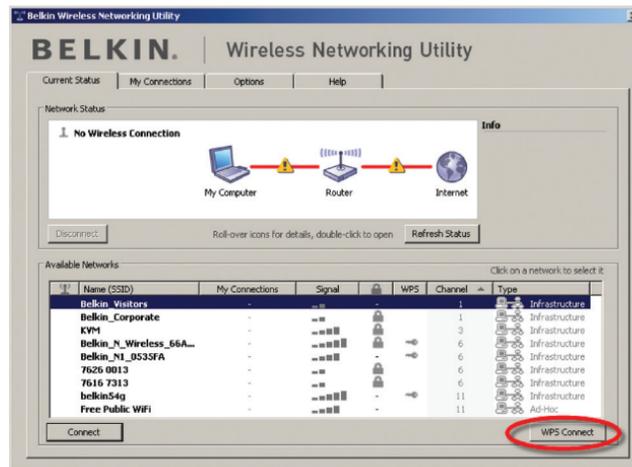
2. For Belkin routers, press the WPS button for two seconds and release. The security icon on the router will flash, indicating that the WPS session has been initiated.

Wi-Fi Protected Setup Message

Initiating - Please press the PBC push button on the Router or an external Registrar within 2 minutes.

Cancel

3. You are now connected to the router.

Wi-Fi Protected Setup Message

Success – The device is connected to the Router

OK
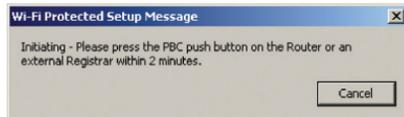
Using Wi-Fi Protected Setup PIN – Personal Identification Number

To use the WPS PIN method, you must have another computer that is already connected to the network and can access the router interface.

1. Select the network to which to connect and click "Connect". (Please note that there should be a key in the WPS column, indicating that this network is WPS-enabled.)
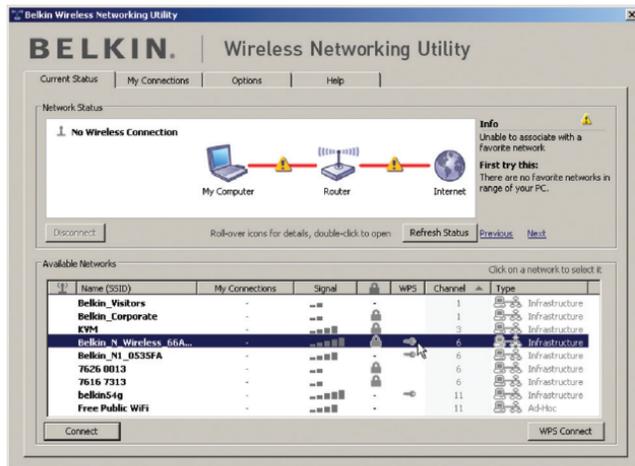
2. Note the PIN number listed and click on "Connect".
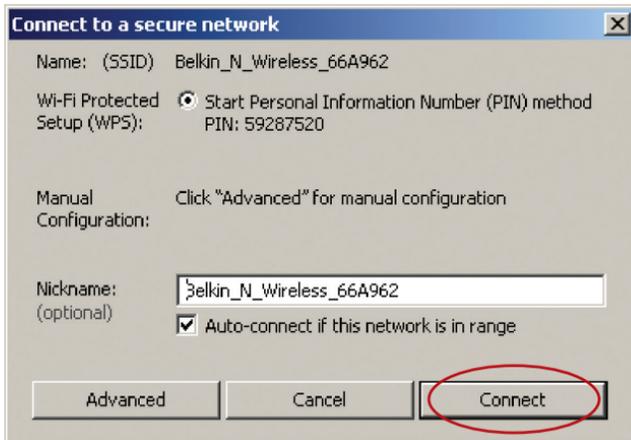
3. On the computer that is already connected to the router, access the router interface, enter the PIN number, and click on "Enroll". Please note that the screenshot below is from a Belkin router; other routers' interfaces will be different.

4. You are now connected to the router.

Wireless Networking Utility Options

The "Options" tab on the WNU provides the user the ability to customize his or her WNU settings.
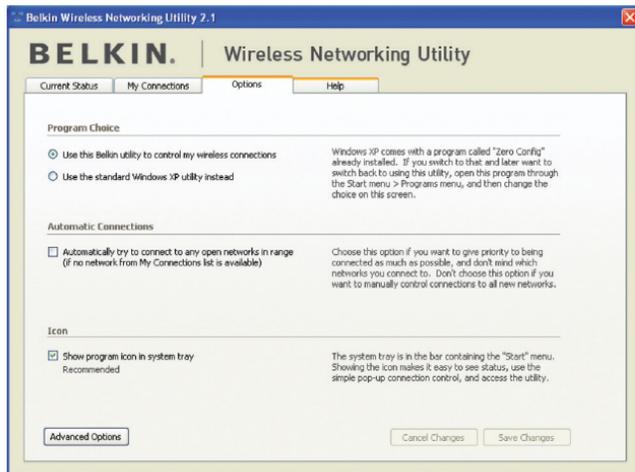
Wireless Networking Utility Help

The WNU "Help" tab provides users with access to online and telephone support, one-click check for upgrades to updated versions of software, and advanced diagnostic tools.
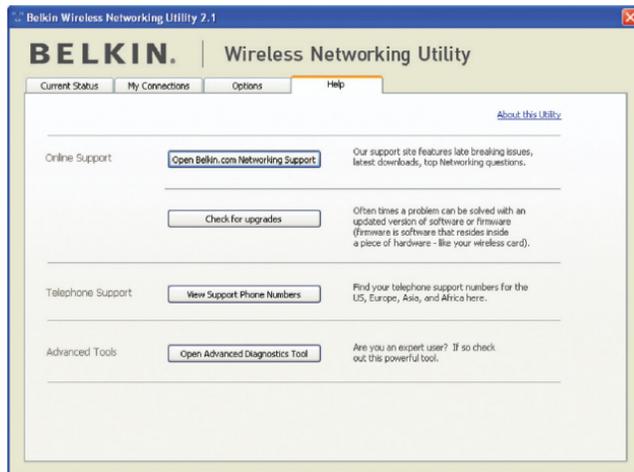
Advanced Diagnostic Tools

The "Advanced Diagnostic Tools" section is the central control panel for all the settings of the hardware and software components of the wireless network. It provides an array of tests and connectivity services to ensure optimal network performance.
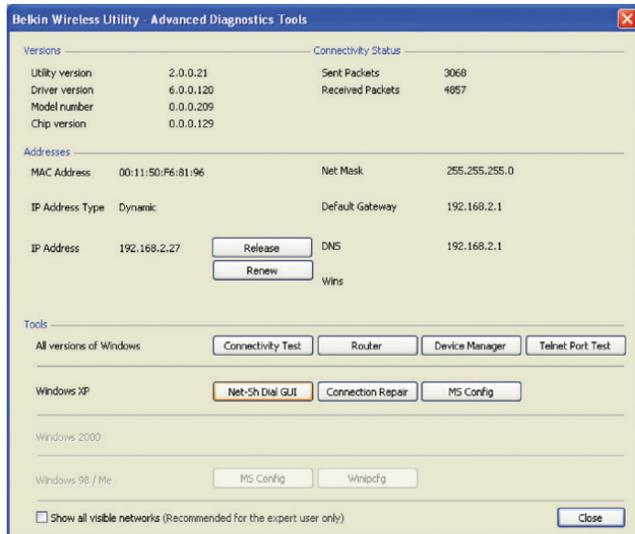
TROUBLESHOOTING

Problem:

I can't connect to the Internet wirelessly.

Solution:

If you are unable to connect to the Internet from a wireless computer, please check the following items:

1. Look at the lights on your wireless router. If you're using a Belkin Wireless Router, the lights should be as follows:

   • The "Power" light should be on.

   • The "Connected" light should be on, and not blinking.

   • The "WAN" light should be either on or blinking.

If your Belkin Wireless Router's lights have the above characteristics, go to number **2** below.

If this is **NOT** the case, make sure:

   • The router's power cord is plugged in.

   • All cables are connected between the router and the modem.

   • All the modem's LEDs are functioning correctly. If not, see your

   modem's user manual.

   • Reboot the router.

   • Reboot the modem.

If you continue to have issues, please contact Belkin Technical Support.

If you are not using a Belkin Wireless Router, consult that router manufacturer's user guide.

2. Open your wireless utility software by clicking on the icon in the system tray at the bottom right-hand corner of the screen. The tray icon should look like this (the icon may be red or green):

3. The window that opens should have a list of "Available Networks".

Available networks are wireless networks to which you can connect.

If you are using a Belkin 802.11g (G Plus) Router, or Belkin 802.11g (54g) Router, "Belkin54g" is the default name.

If you are using a Belkin 802.11b Router, the default name should be "WLAN".

If you are NOT using a Belkin Router, please consult your router manufacturer's user manual for the default name.

Problem:

The name of your wireless network appears in "Available Networks".

Solution:

If the correct network name is listed in the "Available Networks" list, please follow the steps below to connect wirelessly:

1. Click on the correct network name in the "Available Networks" list.

2. If the network has security (encryption) enabled, you must enter the network key. Click "Connect". For more information regarding security, see the page entitled: "Connecting to a Secure Wi-Fi Network" on page 22 of this User Manual.

3. Within a few seconds, the tray icon in the lower right-hand corner of your screen should turn green, indicating a successful connection to the network.

If you are still unable to access the Internet after connecting to the wireless network, please contact Belkin Technical Support.

Problem:

The name of your wireless network DOES NOT appear in the list of "Available Networks".

Solution:

If the correct network name is not listed, check the SSID settings to see if they match. The SSID is case-sensitive and the spelling on each computer must be exactly the same in order for the Adapter to connect to the wireless router (or access point).

Note: To check the SSID settings or look for an available network, double-click the Signal Indicator icon to bring up the "Wireless Networks" screen. Click "Add" if you do not see the network you are trying to connect to and type in the SSID. For more information about setting up an SSID, please reference your router manufacturer's user manual.

If issues persist even at close range, please contact Belkin Technical Support.

Problem:

Installation CD-ROM does not start Belkin Wireless Networking Utility.

Solution:

If the CD-ROM does not start the Belkin Wireless Networking Utility automatically, it could be that the computer is running other applications that are interfering with the CD drive. If the Belkin Wireless Networking Utility screen does not appear within 15-20 seconds, open up your CD-ROM drive by double-clicking on the "My Computer" icon. Next, double-click on the CD-ROM drive in which the Installation CD has been placed to start the installation. If the installation does not start automatically, right-click to select "Explore", then double-click on the icon named "setup.exe".

Problem:

Power LED does not come ON; Adapter is not working.

Solution:

If the LED indicators are not ON, the problem may be that the Adapter is not connected or installed properly. Verify that the Adapter is plugged firmly into the USB port of your computer. Check to see that the drivers for the Adapter have been installed. Right-click on the "My Computer" icon on your desktop. Choose "Properties" and navigate to the "Device Manager" and see if your USB Network Adapter is listed without any errors. If an error is indicated, contact Belkin Technical Support.

Problem:

Link LED is blinking slowly; I cannot connect to a wireless network or the Internet.

Solution:

If your Adapter appears to be functioning properly, but you cannot connect to a network or you have a red wireless icon at the bottom of your screen, the problem may be that there is a mismatch between the network name (SSID) settings in your wireless network properties.

Check the SSID settings to see if they match. The SSID is case-sensitive and the spelling on each computer must be exactly the same in order for the Adapter to connect to the wireless router (or access point).

Note: To check the SSID settings or look for an available network, double-click the Signal Indicator icon to bring up the "Wireless Networks" screen. Click "Add" if you do not see the network you are trying to connect to and type in the SSID.

For more information about setting up an SSID, please reference your router manufacturer's user manual. If issues persist even at close range, please contact Belkin Technical Support.

Problem:

Link LED is solid but I cannot connect to the Internet.

Solution:

If you have a signal but can't get online or obtain an IP address, the problem may be that there is a mismatch between the encryption key settings in your computer and wireless router (or access point). Check the WEP, WPA, or WPA2 key settings to see if they match. The key is case-sensitive and the spelling on each computer and wireless router (or access point) must be exactly the same in order for the Adapter to connect to the router. For more information about encryption, please see "Connecting to a Secure Wi-Fi Network" on page 22 of this User Manual.

If issues persist even at close range, please contact Belkin Technical Support.

Problem:

Data transfer is sometimes slow.

Solution:

Wireless technology is radio-based, which means connectivity and the throughput performance between devices decreases when the distance between devices increases. Other factors that will cause signal degradation (metal is generally the worst culprit) are obstructions such as walls and metal appliances. As a result, the typical indoor range of your wireless devices will be between 100 to 200 feet. Note also that connection speed may decrease as you move farther from the wireless router (or access point).

In order to determine if wireless issues are related to range, we suggest temporarily moving the computer, if possible, to five to 10 feet away from the wireless router (or access point). Please see the section titled "Placement of your Wireless Networking Hardware for Optimal Performance" on page 2 of this User Manual. If issues persist even at close range, please contact Belkin Technical Support.

Problem:

Signal strength is poor.

Solution:

Wireless technology is radio-based, which means connectivity and the throughput performance between devices decreases when the distance between devices increases. Other factors that will cause signal degradation (metal is generally the worst culprit) are obstructions such as walls and metal appliances. As a result, the typical indoor range of your wireless devices will be between 100 to 200 feet. Note also that connection speed may decrease as you move farther from the wireless router (or access point). In order to determine if wireless issues are related to range, we suggest temporarily moving the computer, if possible, to five to 10 feet away from wireless router (or access point).

Changing the wireless channel – Depending on local wireless traffic and interference, switching the wireless channel of your network can improve performance and reliability. The default channel the router is shipped with is channel 6. You may choose from several other channels depending on your region; see your router's (or access point's) user manual for instructions on how to choose other channels.

Limiting the wireless transmit rate – Limiting the wireless transmit rate can help improve the maximum wireless range, and connection stability. Most wireless cards have the ability to limit the transmission rate. To change this property, go to the Windows Control Panel, open "Network Connections" and double-click on your Adapter's connection. In the "Properties" dialog, select the "Configure" button on the "General" tab (Windows 98 users will have to select the USB Network Adapter in the list box and then click "Properties"), then choose the "Advanced" tab and select the rate property. Wireless client cards are usually set to

automatically adjust the wireless transmit rate for you, but doing so can cause periodic disconnects when the wireless signal is too weak; as a rule, slower transmission rates are more stable. Experiment with different connection rates until you find the best one for your environment; note that all available transmission rates should be acceptable for browsing the Internet. For more assistance, see your wireless card's literature. If issues persist even at close range, please contact Belkin Technical Support.

Problem:

Why are there two wireless utilities in my system tray?

Which one do I use?

Solution:

There are several features and advantages from using the Belkin Wireless Networking Utility over the Windows XP Wireless Zero Configuration utility. We offer a site survey, detailed link information, and adapter diagnosis, to name a few.

It's essential to know which utility is managing your Adapter. We recommend using the Belkin Wireless Networking Utility. To use the Belkin Wireless Networking Utility, follow the steps below:

Step 1 Right-click on the network status icon in the system tray and select the "Status" tab.

Step 2 From the "Status" tab, uncheck the "Use Windows to configure my wireless network settings" box. Once the box is unchecked, click the "Close" button to close the window.

You are now using the Belkin Wireless Networking Utility to configure the Adapter.

Problem:

The Adapter does not perform or connection is unstable when computer has a second built-in wireless network card (such as a mini PCI or Intel® Centrino™).

Solution:

This condition occurs if your computer has a built-in wireless card while your Belkin Enhanced Wireless USB Adapter is also active. This happens because Windows must now handle two active wireless connections.

You must disable the built-in wireless card from your computer under "Network Adapters" in the Device Manager.

Problem:

The Adapter does not perform or connection is slow when computer has a built-in wired Ethernet card.

Solution:

This condition occurs if your computer has an active Ethernet card while your Adapter is also active. This happens because Windows must now handle two active network connections. You must disable the Ethernet card from your computer under "Network Adapters" in the Device Manager.

What's the difference between 802.11g and draft 802.11n?

Currently there are three commonly used wireless networking standards, which transmit data at very different maximum speeds. Each is based on the designation for certifying network standards. The most common wireless networking standard, 802.11g, can transmit information up to 54Mbps; 802.11a also supports up to 54Mbps, but in the 5GHz frequency; and 802.11n draft specification can connect at up to 300Mbps. See the following chart for more detailed information.

Wireless Technology	G (802.11g)	Enhanced (1x1 draft 802.11n)	N MIMO (draft 802.11n with MIMO)	N1 MIMO (draft 802.11n with MIMO)
Speed/Data Rate*	Up to 54Mbps*	Up to 150Mbps*	Up to 300Mbps*	Up to 300Mbps*
Frequency	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz	Common household devices such as cordless phones and microwave ovens may interfere with the unlicensed band 2.4GHz
Compatibility	Compatible with 802.11b/g	Compatible with 802.11b/g, draft 802.11n, and Belkin G+ MIMO	Compatible with draft 802.11n and 802.11b/g	Compatible with draft 802.11n and 802.11b/g
Coverage*	Up to 400 ft.*	Up to 1,000 ft.*	Up to 1,200 ft.*	Up to 1,400 ft.*
Advantage	Common—widespread use for Internet sharing	Better coverage and consistent speed and range	Enhanced speed and coverage	Leading edge—best coverage and throughput

*Distance and connection speeds will vary depending on your networking environment.

Technical Support

You can find technical support information at http://www.belkin.com/networking or www.belkin.com/support/.

TROUBLESHOOTING

Technical Support

You can find technical-support information on our website, www.belkin.com, by navigating to the tech-support section.

If you want to contact technical support by phone, please call the number you need from this list*:

*Local rates apply.

COUNTRY	NUMBER	INTERNET ADRESS
AUSTRIA	0820 200766	www.belkin.com/de/networking/
BELGIUM	07 07 00 073	www.belkin.com/nl/networking/ www.belkin.com/fr/networking/
CZECH REPUBLIC	239 000 406	www.belkin.com/uk/networking/
DENMARK	701 22 403	www.belkin.com/uk/networking/
FINLAND	0972519123	www.belkin.com/uk/networking/
FRANCE	08 - 25 54 00 26	www.belkin.com/fr/networking/
GERMANY	0180 - 500 57 09	www.belkin.com/de/networking/
GREECE	00800 - 44 14 23 90	www.belkin.com/uk/networking/
HUNGARY	06 - 17 77 49 06	www.belkin.com/uk/networking/
ICELAND	800 8534	www.belkin.com/uk/networking/
IRELAND	0818 55 50 06	www.belkin.com/uk/networking/
ITALY	02 - 69 43 02 51	www.belkin.com/it/networking/
LUXEMBOURG	34 20 80 85 60	www.belkin.com/uk/networking/
NETHERLANDS	0900 - 040 07 90 €0.10 per minute	www.belkin.com/nl/networking/
NORWAY	81 50 0287	www.belkin.com/uk/networking/
POLAND	00800 - 441 17 37	www.belkin.com/uk/networking/
PORTUGAL	707 200 676	www.belkin.com/uk/networking/
RUSSIA	495 580 9541	www.belkin.com/networking/
SOUTH AFRICA	0800 - 99 15 21	www.belkin.com/uk/networking/
SPAIN	902 - 02 43 66	www.belkin.com/es/networking/
SWEDEN	07 - 71 40 04 53	www.belkin.com/uk/networking/
SWITZERLAND	08 - 48 00 02 19	www.belkin.com/de/networking/ www.belkin.com/fr/networking/
UNITED KINGDOM	0845 - 607 77 87	www.belkin.com/uk/networking/
OTHER COUNTRIES	+44 - 1933 35 20 00	

INFORMATION

FCC Statement
DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Belkin International, Inc., of 501 West Walnut Street, Compton, CA 90220, declare under our sole responsibility that the product, **F6D4050**, to which this declaration relates, complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Exposure to Radio Frequency Radiation. The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized. When connecting an external antenna to the device, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Belkin International, Inc., may void the user's authority to operate the equipment.

Industry Canada Statement

Operation is subject to the following two conditions:

1) this device may not cause interference, and

2) this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE:
IC Radiation Exposure Statement

This equipment complies with Canada radiation exposure limits set forth for uncontrolled environments.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment has been SAR-evaluated for use in laptops (notebooks) with side-slot configuration.

For information on product disposal please refer to
http://environmental.belkin.com

$C \in 0560$ ①

FOR USE IN	AT BE CY CZ DK EE FI FR DE GR HU IE
	IT LV LT LU MT NL PL PT SK SI ES SE GB IS LI
NO CH BG RO TR	**OPERATES ON CHANNELS 1-13**

Restricted Use in Certain Countries.…………………………….Class 2 Equipment

Belkin International, Inc., Limited Lifetime Product Warranty

What this warranty covers.

Belkin International, Inc. ("Belkin") warrants to the original purchaser of this Belkin product that the product shall be free of defects in design, assembly, material, or workmanship.

What the period of coverage is.

Belkin warrants the Belkin product for the lifetime of the product.

What will we do to correct problems?

Product Warranty.

Belkin will repair or replace, at its option, any defective product free of charge (except for shipping charges for the product). Belkin reserves the right to discontinue any of its products without notice, and disclaims any limited warranty to repair or replace any such discontinued products. In the event that Belkin is unable to repair or replace the product (for example, because it has been discontinued), Belkin will offer either a refund or a credit toward the purchase of another product from Belkin.com in an amount equal to the purchase price of the product as evidenced on the original purchase receipt as discounted by its natural use.

What is not covered by this warranty?

All above warranties are null and void if the Belkin product is not provided to Belkin for inspection upon Belkin's request at the sole expense of the purchaser, or if Belkin determines that the Belkin product has been improperly installed, altered in any way, or tampered with. The Belkin Product Warranty does not protect against acts of God such as flood, earthquake, lightning, war, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, damage due to low voltage disturbances (i.e. brownouts or sags), non-authorized program, or system equipment modification or alteration.

INFORMATION

EU DECLARATION OF CONFORMITY

Česky [Czech]	*[Belkin Ltd]* tímto prohlašuje, že tento *[F6D4050]* je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede *[Belkin Ltd]* erklærer herved, at følgende udstyr *[F6D4050]* overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt *[Belkin Ltd]*, dass sich das Gerät *[F6D4050]* in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab *[Belkin Ltd]* seadme *[F6D4050]* vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, *[Belkin Ltd]*, declares that this product *[F6D4050]* is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente *[Belkin Ltd]* declara que el *[F6D4050]* cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ *[Belkin Ltd]* ΔΗΛΩΝΕΙ ΟΤΙ *[F6D4050]* ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente *[Belkin Ltd]* déclare que l'appareil *[F6D4050]* est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente *[Belkin Ltd]* dichiara che questo *[F6D4050]* è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo *[Belkin Ltd Belkin Ltd]* deklarē, ka *[F6D4050] / iekārtas tips]* atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo *[Belkin Ltd]* deklaruoja, kad šis *[F6D4050]* atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart *[Belkin Ltd]* dat het toestel *[F6D4050]* in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, *[Belkin Ltd]*, jiddikjara li dan *[F6D4050]* jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, *[Belkin Ltd]* nyilatkozom, hogy a *[F6D4050]* megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym *[Belkin Ltd]* oświadcza, że *[F6D4050]* jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	*[Belkin Ltd]* declara que este *[F6D4050]* está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	*[l Belkin Ltd]* izjavlja, da je ta *[F6D4050]* v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	*[Belkin Ltd]* týmto vyhlasuje, že *[F6D4050]* spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

Suomi [Finnish]	*[Belkin Ltd]* vakuuttaa täten että *[F6D4050]* tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar *Belkin Ltd* att denna *[F6D4050]* står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir *[Belkin Ltd]* yfir því að *[F6D4050]* er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	*[Belkin Ltd]* erklærer herved at utstyret *[F6D4050]* er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

http://www.belkin.com/doc/

How to get service.

Contact Belkin Limited on the support telephone numbers on page 36

Belkin reserves the right to review the damaged Belkin product. All costs of shipping the Belkin product to Belkin for inspection shall be borne solely by the purchaser. If Belkin determines, in its sole discretion, that it is impractical to ship the damaged equipment to Belkin, Belkin may designate, in its sole discretion, an equipment repair facility to inspect and estimate the cost to repair such equipment. The cost, if any, of shipping the equipment to and from such repair facility and of such estimate shall be borne solely by the purchaser. Damaged equipment must remain available for inspection until the claim is finalized. Whenever claims are settled, Belkin reserves the right to be subrogated under any existing insurance policies the purchaser may have.

How state law relates to the warranty.

THIS WARRANTY CONTAINS THE SOLE WARRANTY OF BELKIN. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR, EXCEPT AS REQUIRED BY LAW, IMPLIED, INCLUDING THE IMPLIED WARRANTY OR CONDITION OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SUCH IMPLIED WARRANTIES, IF ANY, ARE LIMITED IN DURATION TO THE TERM OF THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

IN NO EVENT SHALL BELKIN BE LIABLE FOR INCIDENTAL, SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR MULTIPLE DAMAGES SUCH AS, BUT NOT LIMITED TO, LOST BUSINESS OR PROFITS ARISING OUT OF THE SALE OR USE OF ANY BELKIN PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state. Some states do not allow the exclusion or limitation of incidental, consequential, or other damages, so the above limitations may not apply to you.

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28108, Alcobendas, Madrid
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